

What is claimed is:

1. A real time, multiple path imaging system, comprising:

a plurality of independent optical viewing devices, each
5 of said optical devices having at least one optical viewing path;

SUB A1
a beam splitter removably attached to each of said optical viewing devices, each beam splitter having a first split beam path continuing said at least one optical viewing
10 path and enabling optical viewing and a second split beam path;

an electronic video imaging device removably attached to each of said viewing devices, in alignment with respective ones of said second split beam paths;

15 a video processor coupled to each of said video imaging devices for creating a real time video signal representing images in said optical viewing path;

a transmitter coupled to each of said video processors for wireless transmission of said respective video signal to a
20 remote receiving station, said transmitted video signals being distinguishable from one another.

2. The imaging system of claim 1, further comprising an eyepiece terminating at least one of said at least one optical viewing paths, said beam splitter being aligned with said
25 eyepiece.

3. The imaging system of claim 2, wherein said respective beam splitters and said respective video imaging devices are formed as part of an integral unit, said integral unit having means for removable attachment to said respective
30 at least one eyepiece.

SUB A2
4. The imaging system of claim 1, wherein said video signals are distinguishable from one another by data in an on screen display added to said respective video signals by said respective video processors.

35 5. The imaging system of claim 1, wherein said video signals are distinguishable from one another by respective transmission carrier frequencies.

6. The imaging system of claim 4, wherein said data

identifies said respective video processors.

7. The imaging system of claim 4, wherein said data represents information from a global positioning sensor.

8. The real time imaging system of claim 1, wherein at least one of said optical viewing devices comprises a monocular.

9. The imaging system of claim 1, wherein at least one of said optical viewing devices comprises a binocular.

10. The imaging system of claim 1, wherein at least one of said optical viewing devices comprises a periscope.

11. The imaging system of claim 1, wherein at least one of said optical viewing devices comprises multiple mirrors.

12. The imaging system of claim 1, wherein said respective video processors and said transmitters are formed as part of an integral unit, said integral units being connected to said respective imaging devices by respective flexible couplings.

13. The imaging system of claim 1, further comprising a viewing screen terminating at least one of said at least one optical viewing paths, said viewing screen having a viewing surface on which said beam splitter is substantially centrally disposed.

14. The imaging system of claim 13, wherein said beam splitter is adhesively bonded to said viewing surface.

15. The imaging system of claim 13, wherein said electronic imaging device is disposed at a perimeter position of said viewing screen, said electronic imaging device comprising an objective lens for focusing images from said beam splitter propagated along said second split beam path.

16. The imaging system of claim 1, wherein said wireless transmission comprises a satellite link.